

1 **ABSTRACT**

2 A pseudo-differential signaling system uses a plurality of signal lines and a  
3 single, common reference voltage. Signal line voltages are interpreted only in  
4 comparison to the reference line voltage. Within a receiving circuit, the reference  
5 line is buffered prior to its distribution to multiple comparators. The system  
6 utilizes an active buffer having a bandwidth that is significantly greater than the  
7 resonant input frequency of the receiving circuit. In an alternative embodiment,  
8 the signal lines are also buffered. In this embodiment, the buffers are  
9 implemented with transistor-based source-followers. The buffer associated with  
10 the reference line has a larger current capacity than the buffers associated with the  
11 signal lines. In yet another embodiment, a comparator produces a correction  
12 signal that is equal to the noise present on the signal lines. This noise is then  
13 subtracted from the signal voltages.

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